

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN**

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**Application of Milwaukee Water Works,  
Milwaukee County, Wisconsin, for  
Authority to Increase Water Rates**

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**Docket 3720-WR-107**

**Rebuttal Testimony<sup>1</sup>  
of Michael Gorman**

1    **Q     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A     Michael Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,  
3           Chesterfield, MO 63017.

4    **Q     ARE YOU THE SAME MICHAEL GORMAN WHO FILED DIRECT AND REBUTTAL**  
5           **TESTIMONY IN THIS PROCEEDING?**

6    A     Yes. I filed direct testimony on April 23, 2010 and rebuttal testimony on May 14, 2010  
7           on behalf of MillerCoors, LLC, a brewery located in Milwaukee which is a large user of  
8           water on the Milwaukee Water Works utility (MWW).

9    **Q     WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

10   A     I will respond to the supplemental direct testimony of Staff witnesses David  
11          Prochaska and Andrew Behm.

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<sup>1</sup> This testimony rebuts the Staff's supplemental direct testimony filed on June 23, 2010 under the June 30, 2010 Order to Establish Schedule.

**Q WHAT ARE YOUR COMMENTS CONCERNING THE SUPPLEMENTAL DIRECT TESTIMONY OF DAVID PROCHASKA?**

A Mr. Prochaska sponsors the Staff's proposed comparison of revenue at present rates, revenue cost of service, and revenue at Staff's proposed rates. As shown on his Schedule 12, page 1, Staff is proposing a 28.5% increase for the urban industrial water class relative to current rates. In comparison, Staff proposes a total system average increase of 25.5%, and an increase to total urban retail of 26.76%.

**Q DO YOU BELIEVE STAFF'S PROPOSED RATES ARE SUPPORTED BY A RELIABLE COST OF SERVICE STUDY?**

A No. As discussed in detail below, there are significant shortcomings in Staff's cost of service study that render it unreliable for using as a gauge for setting rates in this case. Further, in many cases Staff witness Andrew Behm asserts the need for a more detailed investigation of certain key cost of service allocation parameters, but apparently has not undertaken that investigation. For example, Staff acknowledges the need to collect data to produce actual MWW class max hour and max day demand factors. Therefore, the Staff cost of service model should be set aside in this case, and all rates should be adjusted on an equal percentage basis for all customer classes.

1 **Staff's Class Cost of Service Study**

2 **Q PLEASE OUTLINE WHICH PARAMETERS OF STAFF'S COST OF SERVICE**  
3 **STUDY NEED GREATER INVESTIGATION BEFORE AN ACCURATE CLASS**  
4 **COST OF SERVICE STUDY CAN BE DEVELOPED TO SET RATES.**

5 **A** Many of these factors are outlined in Staff witness Andrew Behm's testimony. These  
6 factors include the following:

- 7 1. The proper classification and allocation of purchased power expense between  
8 base volume and extra capacity. By allocating purchased power costs to base  
9 load, Mr. Behm unfairly penalizes large industrial customers.
- 10 2. While Staff acknowledges it is reasonable to allocate transmission cost to the max  
11 hour classification, it continues to allocate all transmission cost to max day extra  
12 capacity. This misallocates transmission main cost between customer classes.
- 13 3. Staff recognizes that its proposed system max day and max hour allocation  
14 factors are inconsistent with MWW's actual historical data. As such, Staff max  
15 hour and max day are not based on MWW's actual customer load data.  
16 Therefore, the system extra capacity allocation factors are not reliable. As a  
17 result, Staff's cost study does not properly classify costs as base and extra  
18 capacity.
- 19 4. Staff does not dispute the fact that the base, max hour and max day allocation  
20 factors it uses are very different from those previously used by the Wisconsin  
21 Public Service Commission in setting rates for MWW. Staff uses base, max day  
22 and max hour allocation factors used by other water utilities as a proxy for  
23 appropriate allocation factors for MWW in this case. This practice is simply  
24 unreliable because it does not reflect MWW's actual customer load profile in  
25 designing these important allocation factors. Staff does recognize that MWW will  
26 be gathering customer demand information before its next rate case to help  
27 strengthen and develop more accurate class demand allocation factors for  
28 MWW's next rate case, but nevertheless proceeds with its speculative allocation  
29 factors in this case.

30 **Q PLEASE DESCRIBE MR. BEHM'S RESPONSE TO YOUR PROPOSAL TO**  
31 **ALLOCATE A PORTION OF TRANSMISSION MAIN COST TO THE MAX HOUR**  
32 **FUNCTION.**

33 **A** Mr. Behm recognized that Wholesale Customers' witness Mr. Rothstein and I  
34 recommend allocating a portion of transmission main costs using the max hour

1 allocator rather than simply the max day allocation factor as he has done. Mr. Behm  
2 concluded that conceptually the proposal to allocate a portion of transmission main  
3 cost on max hour is reasonable. (SD12.18). However, he argues that even though it  
4 is reasonable to allocate a portion to the max hour function, allocating transmission  
5 main cost on a controlling design parameter of max day demand is also reasonable.  
6 He also asserts that allocating some portion to max hour does not have a large effect  
7 on the cost of service study.

8 **Q DO YOU BELIEVE MR. BEHM'S RESPONSE DEMONSTRATES THAT HIS**  
9 **PROPOSED COST OF SERVICE STUDY PROPERLY ALLOCATES**  
10 **TRANSMISSION COSTS BETWEEN CLASSES?**

11 A No. Mr. Behm's principal argument is that transmission mains are only designed for  
12 base and max day demands. However, he has not substantiated this claim.

13 To the contrary, transmission mains need to be designed to meet max hour  
14 and max day requirements. Sizing transmission mains to meet max hour flow is an  
15 important factor that ensures enough water can move from storage and production  
16 facilities to end-use customers during the highest hourly demand on the system. If  
17 transmission mains are not sized properly, the amount of water flow available for the  
18 max hour demands could not be moved from storage and/or production sources to  
19 end-use customers. Hence, Mr. Behm's belief that max day is the controlling  
20 parameter is simply without foundation. Max hour system flows must also be  
21 considered in sizing transmission mains, and therefore a portion of transmission  
22 mains cost should be allocated using a max hour demand ratio.

23 Further, his argument that allocating a portion of transmission cost using max  
24 hour will have a minimal impact on cost of service study is without merit. His own  
25 analysis shows that there is meaningful cost moved between different rate groups if a

1 portion of transmission main costs is allocated to max hour as well as base and max  
2 day. In particular, allocating transmission cost using only base and max day  
3 demands disproportionately shifts costs to industrial customers, because industrial  
4 customers have lower contributions to peak hour demand relative to peak day  
5 demand. Hence, Staff's cost of service study should be modified to allocate a  
6 reasonable portion of transmission cost to the max hour classification. Staff's  
7 continued failure to do so illustrates one of the fundamental problems with its cost  
8 allocation methodology.

9 **Q PLEASE DESCRIBE MR. BEHM'S RESPONSE TO YOUR CONCERN THAT THE**  
10 **SYSTEM BASE AND MAX DAY, MAX HOUR RATIOS DO NOT REFLECT MWW'S**  
11 **NORMAL CUSTOMER LOAD PROFILE.**

12 **A** Mr. Behm responds that MWW system max day and average day ratios can be  
13 impacted by cool and wet summers which have taken place during 2008 and 2009.  
14 However, he believes that a pronounced and persistent trend in decreasing peak  
15 demands experienced by MWW suggests a more permanent and fundamental driver  
16 which would discredit the use of previous max day and max hour ratios for MWW's  
17 cost of service study. He declines to use actual six-year history in deriving max day  
18 and max hour ratios because he believes there is a consistent and persistent  
19 declining trend in max day ratios.

20 **Q HAS MR. BEHM PROVIDED ADEQUATE JUSTIFICATION FOR THE MAX DAY**  
21 **AND MAX HOUR RATIOS HE USES IN HIS STUDY?**

22 **A** No. Again, Mr. Behm's methodology disproportionately impacts large industrial  
23 customers because it under-allocates cost to extra capacity demand factors. By  
24 under-allocating cost to the extra capacity demand factors he is not recognizing the

1 cost associated with lower load factor customers that peak the system and require  
2 increased peak demand-related cost. Consequently, he over-allocates cost to high  
3 load factor industrial customers and under-allocates cost to low load factor residential  
4 customers. The max day, max hour ratios over the last six years reflect normalized  
5 conditions which are the best representation of MWW's actual customer load profiles.  
6 While a trend over longer periods of time may reflect declining demands, declining  
7 demands do not necessarily indicate changes in customer load profile. The max day  
8 and max hour ratios should reflect current load profile, that is, the load factor of all the  
9 customers on the MWW system. Hence, it is most reasonable to use normalized  
10 sales conditions in deriving these max day, max hour system load profiles.

11 **Q PLEASE DESCRIBE MR. BEHM'S RESPONSE TO YOUR CONCERN ABOUT HIS**  
12 **USE OF CUSTOMER DEMAND RATIOS RELATIVE TO THE 2007 MWW COST OF**  
13 **SERVICE STUDY.**

14 **A** Mr. Behm acknowledges that he changed the customer class demand ratios relative  
15 to the 2007 MWW cost of service study based on his judgment and a review of  
16 demand ratios used by other water utilities. (SD12.22). He also agreed that the  
17 demand ratios he used are significantly different from those used in the 2007 study.  
18 However, he believes that these facts do not prove that the demand ratios he used  
19 are unreasonable. He asserts that use of class demand ratios more in line with those  
20 used by other utilities is reasonable.

21 **Q PLEASE RESPOND TO MR. BEHM'S SUPPORT FOR HIS CLASS DEMAND**  
22 **RATIOS.**

23 **A** The fact of the matter is nobody has proven what the appropriate or reasonable class  
24 demand ratios are for use in MWW's current cost of service study. The class cost of

1 service study has changed significantly from the 2007 cost of service study, so there  
2 should be adequate justification to show a need for a change. Mr. Behm has not  
3 provided justification to change the class demand ratios in this case.

4 Simply asserting that demand ratios for MWW should be comparable to other  
5 water utilities simply does not take the load characteristics of MWW into account and  
6 it will not produce a reliable MWW cost of service study. Indeed, if MWW has more  
7 larger industrial or higher load factor wholesale customers, or a combination of these  
8 factors, it may have significantly different peak day and hour ratios than other water  
9 utilities.

10 The load characteristics of MWW's customers may be based on factors that  
11 are unique and not representative of other water utilities, but Mr. Behm has declined  
12 to examine those factors. Therefore, it is not appropriate to change long-standing  
13 class demand factors simply because they may—or may not—be representative of  
14 demand factors used by other utilities.

15 **Q DOES STAFF RECOGNIZE THAT MWW WILL BEGIN TO COLLECT DATA THAT**  
16 **CAN BE USED TO MEASURE UPDATED MWW DEMAND RATIOS?**

17 **A** Yes. Mr. Behm does acknowledge that MWW will begin to collect data that may allow  
18 for reasonable estimates of actual customer demand ratios in future rate cases. With  
19 this as an objective, it would be more reasonable to continue to use the same  
20 demand ratios in MWW's cost of service study until those actual MWW class cost  
21 factors can be estimated. This will allow for a more stable transition from current rate  
22 structures to future rate structures, if the study actually supports revised customer  
23 class demand factors, as Mr. Behm believes.

1    **Q     DID MR. BEHM COMMENT ON YOUR PROPOSAL TO ALLOCATE A PORTION**  
2    **OF ELECTRIC POWER COST ON PEAK DAY DEMAND FACTORS?**

3    A     Yes. He declined to allocate any portion of purchased power cost to extra capacity  
4         function and continues to recommend allocating it on base function.

5                 While he acknowledges that various accounts of MWW's pumping stations do  
6         incur electric power demand charges, he declines to accept the notion that demand  
7         charges for electricity are tied to maximum day or maximum hour demands.

8                 The argument is simple and Mr. Behm does not refute it. As part of its cost to  
9         provide service, MWW incurs electric demand charges. Such electric demand  
10        charges are tied to the peak hour electric demand in any given month. The peak  
11        hour electric demand is in turn driven by peak hour pumping volume. Consequently,  
12        the principle of cost causation calls for tying electric demand charges to the water  
13        utility's peak day demand factors. Nevertheless, he sets aside this logical and  
14        reasonable assessment of how electric power costs are incurred, and simply  
15        allocates all purchased power costs on volume. This misallocates costs, and  
16        produces an unreliable cost of service study.

17                One thing is certain in Mr. Behm's review of electric power costs incurred by  
18        MWW and that is that electric power costs are not incurred as a direct function of  
19        volume alone. Rather, electric power costs are incurred on the basis of volume *and*  
20        peak demands on the MWW system which drive electric capacity demands and  
21        energy usage during the test year. Therefore, some recognition and some cost  
22        allocation of electric power costs on peak day or peak hour demands should be made  
23        in order to properly allocate electric power costs between customer classes.



1    **Q       BASED ON YOUR TESTIMONY ABOVE, WHAT WEIGHT DO YOU SUGGEST THE**  
2       **COMMISSION GIVE STAFF'S COST OF SERVICE STUDY?**

3    A       Very little. I suggest that because of the substantive deficiencies I and other  
4       intervenors identified, Staff's cost of service study should be set aside and rates for  
5       all customer classes should be adjusted equally.

6    **Q       DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

7    A       Yes, it does.

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